AVI

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
(CFMTC)
Machine Id
[CFMTC] CESSNA 182P 089915-R (S/N 089915-P)
Component
Center Piston Aircraft Engine
Fluid
PHILLIPS 66 AVIATION X/C OIL SAE20W50 (12 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

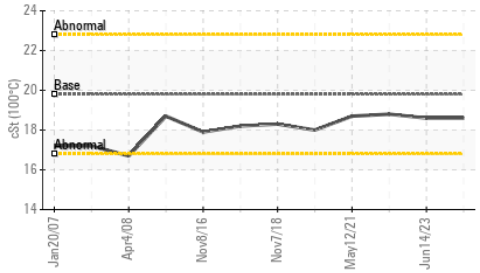
There is no indication of any contamination in the oil.

FLUID CONDITION

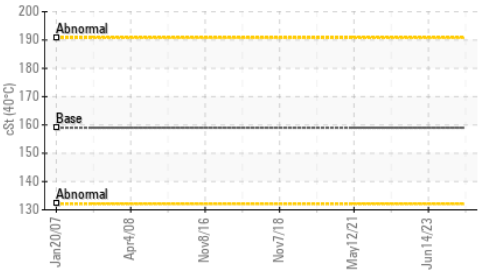
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0952997	WC0820330	WC0685300
Sample Date		Client Info		21 Jun 2024	14 Jun 2023	30 May 2022
TSN	hrs	Client Info		0	0	0
TSO	hrs	Client Info		101	0	85
Oil Age	hrs	Client Info		10	14	8
Filter Age	hrs	Client Info		10	14	8
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
PQ		ASTM D8184*		8	4	2
Iron	ppm	ASTM D5185(m)	>90	135	144	134
Chromium	ppm	ASTM D5185(m)	>20	12	15	14
Nickel	ppm	ASTM D5185(m)	>15	3	4	3
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>5	0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	12	16	13
Lead	ppm	ASTM D5185(m)	>20000	1246	1380	933
Copper	ppm	ASTM D5185(m)	>25	5	7	5
Tin	ppm	ASTM D5185(m)	>30	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185(m)	>15	7	9	9
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Silt	scalar	Visual*	NONE	NONE	VLITE	LIGHT
Debris	scalar	Visual*	NONE	NONE	VLITE	VLITE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		<1	<1	<1
Boron	ppm	ASTM D5185(m)		<1	<1	<1
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		7	8	7
Manganese	ppm	ASTM D5185(m)		1	2	2
Magnesium	ppm	ASTM D5185(m)		<1	<1	<1
Calcium	ppm	ASTM D5185(m)		1	2	5
Phosphorus	ppm	ASTM D5185(m)		<1	3	1
Zinc	ppm	ASTM D5185(m)		3	4	4
Sulfur	ppm	ASTM D5185(m)		993	1042	981
Visc @ 40°C	cSt	ASTM D7279(m)	159	159	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	19.8	18.6	18.6	18.8
Viscosity Index (VI)	Scale	ASTM D2270*	144	131	---	---

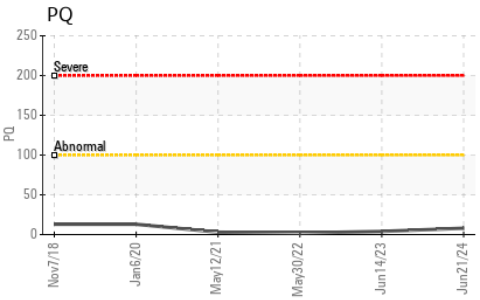
Viscosity @ 100°C



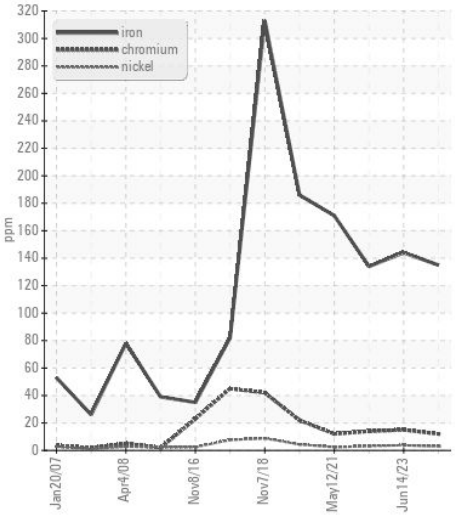
Viscosity @ 40°C



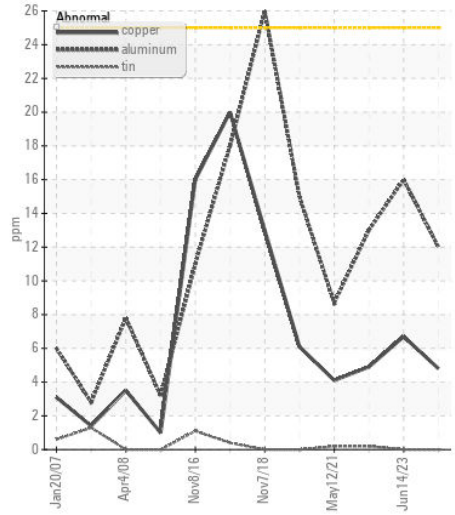
PQ



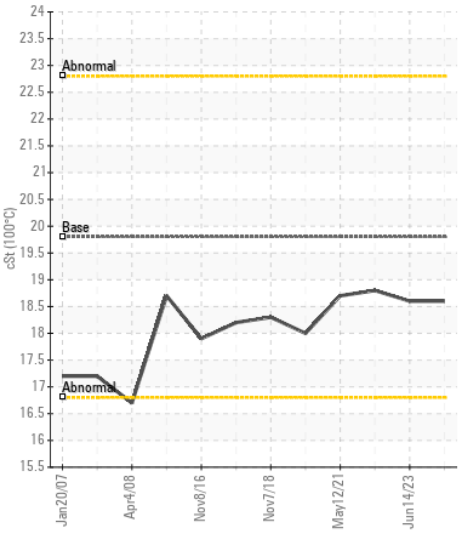
Ferrous Alloys



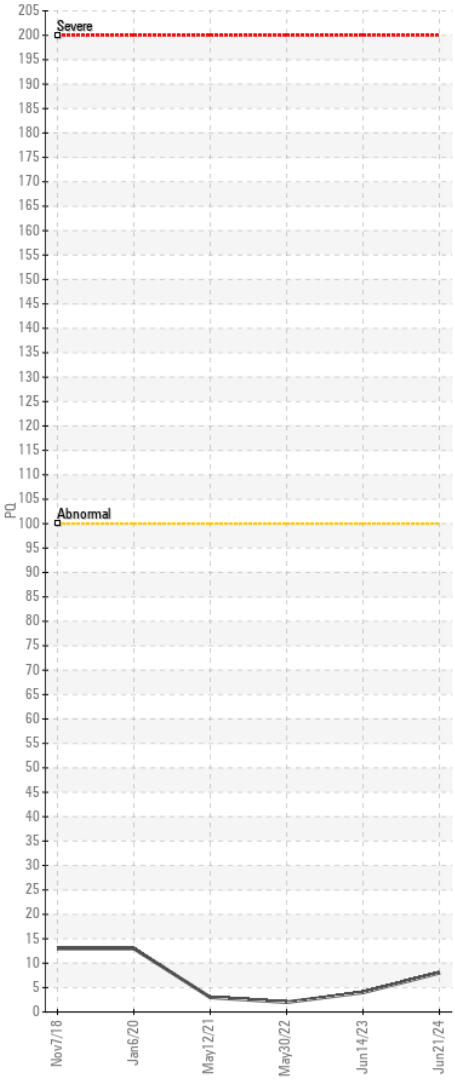
Copper/Aluminum/Tin



Viscosity @ 100°C



PQ



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0952997
Lab Number : 02644158
Unique Number : 5801697
Test Package : AVI 1 (Additional Tests: KV40, PQ, VI)

Received : 26 Jun 2024
Tested : 26 Jun 2024
Diagnosed : 27 Jun 2024 - Kevin Marson

To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.

CORPORATE AIRCRAFT RESTORATIONS
481 AVIATOR LANE
OSHAWA, ON
CA L1J 0B8
Contact: Maurice Nesbitt
hangar@bellnet.ca
T: (905)434-5173
F: (905)983-9599